

## CLAIMS

- 1 1. A method for managing a peer-to-peer collaboration system in which users  
2 having identities are directly connected to each other in a shared private space  
3 by client software operating in devices and wherein the users can communicate  
4 with a management server using the client software, the method comprising:  
5 (a) sending a request from the management server to the user to become a  
6 managed entity;  
7 (b) downloading from the management server to the client software a  
8 definition file containing a definition of the managed entity; and  
9 (c) associating information in the definition file with user identities and device  
10 in the client software in order to create a managed entity.  
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- (f) sending at least one policy restriction file from the management server to the managed user; and
- (g) in response to information in the policy restriction file, restricting at least one function in the client software.

7. The method of claim 1 further comprising:

- (h) creating a client list of licensed components and policy restrictions in the client software of the managed user;
- (i) sending the client list to the management server;
- (j) creating a server list of licensed components and policy restrictions in the management server;
- (k) comparing the client list to the server list; and
- (l) adjusting and synchronizing the components in the client software based on the comparison on step (k).

8. The method of claim 7 wherein step (l) comprises downloading and installing licensed components from the management server to the client software which components are on the server list and are not on the client list.

9. The method of claim 7 wherein step (l) further comprises revoking licenses in the client software of components are on the client list and are not on the server list.

10. The method of claim 7 wherein steps (h) to (l) are repeated periodically.

11. The method of claim 1 further comprising:

- (m) periodically sending event notifications and statistical information from the client software of the managed user to the management server.

12. The method of claim 11 wherein the event notifications include error notifications.

- 1 13. The method of claim 11 wherein event notifications and statistical information are  
2 temporarily stored in a memory located at a client site.
- 1 14. Apparatus for managing a peer-to-peer collaboration system in which users  
2 having identities are directly connected to each other in a shared private space  
3 by client software operating in devices and wherein the users can communicate  
4 with a management server using the client software, the apparatus comprising:  
5 management software that sends a request from the management server  
6 to the user to become a managed entity;  
7 a download manager that downloads from the management server to the  
8 client software a definition file containing a definition of the managed entity; and  
9 a mechanism in the client software that associates the definition  
10 information with the user identities and device information in the client software in  
11 order to create a managed user.
- 1 15. The apparatus of claim 14 wherein the managed entity is a managed user and  
2 the definition information file is an injectible identity file.
- 1 16. The apparatus of claim 14 wherein the managed entity is a managed device and  
2 the definition information file is a device information file.
- 1 17. The apparatus of claim 16 wherein the device information file is a Windows REG  
2 file.
- 1 18. The apparatus of claim 14 further comprising:  
2 license control software in the management server that sends at least one  
3 license file from the management server to the managed user; and

4 license control software in the client software that, in response to  
5 information in the license file, enables at least one function in the client software.

1 19. The apparatus of claim 14 further comprising:

2 policy control software in the management server that sends at least one  
3 policy restriction file from the management server to the managed user; and

4 policy control software in the client software that, in response to  
5 information in the policy restriction file, restricts at least one function in the client  
6 software.

1 20. The apparatus of claim 14 further comprising:

2 management software in the management server that creates a client list  
3 of licensed components and policy restrictions in the client software of the  
4 managed user;

5 a transport mechanism that sends the client list to the management  
6 server;

7 management software in the client software that creates a server list of  
8 licensed components and policy restrictions in the management server;

9 a mechanism that compares the client list to the server list; and

10 a mechanism that adjusts and synchronizes the components in the client  
11 software in cooperation with the comparison mechanism.

1 21. The apparatus of claim 20 wherein the adjusting and synchronizing mechanism  
2 comprises a download manager that downloads and installs licensed  
3 components from the management server to the client software which  
4 components are on the server list and are not on the client list.

- 1 22. The apparatus of claim 21 wherein the adjusting and synchronizing mechanism  
2 further comprises a mechanism that revokes licenses in the client software of  
3 components are on the client list and are not on the server list.
- 1 23. The apparatus of claim 21 wherein the adjusting and synchronizing mechanism  
2 operates periodically.
- 1 24. The apparatus of claim 14 further comprising:  
2 customer service management software that periodically sends event  
3 notifications and statistical information from the client software of the managed  
4 user to the management server.
25. The apparatus of claim 24 wherein the event notifications include error  
notifications.
26. The method of claim 24 wherein event notifications and statistical information are  
temporarily stored in a memory located at a client site.
27. A computer program product for managing a peer-to-peer collaboration system in  
which users having identities are directly connected to each other in a shared  
private space by client software operating in devices and wherein the users can  
communicate with a management server using the client software, the computer  
program product comprising a computer usable medium having computer  
readable program code thereon, including:  
program code for sending a request from the management server to the  
user to become a managed entity;  
program code for downloading from the management server to the client  
software a definition file containing a definition of the managed entity; and

11                    program code for associating information in the definition file with user  
12 identities and device in the client software in order to create a managed entity.

1    28.    The computer program product of claim 27 wherein the managed entity is a  
2 managed user and the definition information file is an injectible identity file.

1    29.    The computer program product of claim 27 wherein the managed entity is a  
2 managed device and the definition information file is a device information file.

1    30.    The computer program product of claim 29 wherein the device information file is  
2 a Windows REG file.

1    31.    The computer program product of claim 27 further comprising:  
2            program code for sending at least one license file from the management  
3 server to the managed user; and  
4            program code that responds to information in the license file for enabling  
5 at least one function in the client software.

1    32.    The computer program product of claim 27 further comprising:  
2            program code for sending at least one policy restriction file from the  
3 management server to the managed user; and  
4            program code that responds to information in the policy restriction file for  
5 restricting at least one function in the client software.

1    33.    The computer program product of claim 27 further comprising:  
2            program code for creating a client list of licensed components and policy  
3 restrictions in the client software of the managed user;  
4            program code for sending the client list to the management server;

5                   program code for creating a server list of licensed components and policy  
6 restrictions in the management server;  
7                   program code for comparing the client list to the server list; and  
8                   program code that cooperates with the comparing program code for  
9 adjusting and synchronizing the components in the client software.

1 34. The computer program product of claim 33 wherein the program code for  
2 adjusting and synchronizing the components comprises program code for  
3 downloading and installing licensed components from the management server to  
4 the client software which components are on the server list and are not on the  
5 client list.

35. The computer program product of claim 33 wherein the program code for  
adjusting and synchronizing the components further comprises program code for  
revoking licenses in the client software of components are on the client list and  
are not on the server list.

36. The computer program product of claim 33 wherein program code for adjusting  
and synchronizing the components operates periodically.

1 37. The computer program product of claim 27 further comprising:  
2                   program code for periodically sending event notifications and statistical  
3 information from the client software of the managed user to the management  
4 server.

1 38. The computer program product of claim 37 wherein the event notifications  
2 include error notifications.

1 39. The computer program product of claim 37 further comprising program code for  
2 temporarily storing event notifications and statistical information in a memory  
3 located at a client site.

1 40. A computer data signal embodied in a carrier wave for managing a peer-to-peer  
2 collaboration system in which users having identities are directly connected to  
3 each other in a shared private space by client software operating in devices and  
4 wherein the users can communicate with a management server using the client  
5 software, the computer data signal comprising:

6 program code for sending a request from the management server to the  
7 user to become a managed entity;

8 program code for downloading from the management server to the client  
9 software a definition file containing a definition of the managed entity; and

10 program code for associating information in the definition file with user  
11 identities and device in the client software in order to create a managed entity.

1 41. Apparatus for managing a peer-to-peer collaboration system in which users  
2 having identities are directly connected to each other in a shared private space  
3 by client software operating in devices and wherein the users can communicate  
4 with a management server using the client software, the apparatus comprising:

5 means for sending a request from the management server to the user to  
6 become a managed entity;

7 means for downloading from the management server to the client software  
8 a definition file containing a definition of the managed entity; and

9 means in the client software for associating the definition information with  
10 the user identities and device information in the client software in order to create  
11 a managed user.



- 1 42. The apparatus of claim 41 wherein the managed entity is a managed user and  
2 the definition information file is an injectible identity file.
- 1 43. The apparatus of claim 41 wherein the managed entity is a managed device and  
2 the definition information file is a device information file.
- 1 44. The apparatus of claim 43 wherein the device information file is a Windows REG  
2 file.
- 1 45. The apparatus of claim 41 further comprising:  
2 means for sending at least one license file from the management server to  
3 the managed user; and  
4 means responsive to information in the license file for enabling at least  
5 one function in the client software.
- 1 46. The apparatus of claim 41 further comprising:  
2 means for sending at least one policy restriction file from the management  
3 server to the managed user; and  
4 means responsive to information in the policy restriction file for restricting  
5 at least one function in the client software.